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(54) METHOD FOR FORMING SILVER FILM ON COPPER METAL

(57)Abstract:

PURPOSE: To easily form a silver plating on the surface of copper or copper alloy by bringing the above-mentioned surface into contact with an aq. soln. contg. an alkyl imidazole compd., org. acid (salt) and silver nitrate.

CONSTITUTION: A treating soln. of pH3.0 to 4.5 formed by adding the alkyl imidazole compd. expressed by formula, the org. acid and the salt of the org. acid to an aq. soln. formed by adding 0.01 to 1.0%, more preferably 0.05 to 0.5% silver nitrate to water is prepd. For example, 2-aminoimidazole is used as the above-mentioned alkyl imidazole compd. and, for example, acetic acid is used as the org. acid, respectively. The org. acid is preferably added in the

form of the salt thereof. The above-mentioned treating liquid is usually kept at 20 to 60°C and is brought into contact with the copper or copper alloy for 30 seconds to 5 minutes, by which the silver film is formed on the above-mentioned copper metal. This silver plating is adequate for the surface treatment of terminals, etc., of electronic parts. The silver plating on the small copper metals in the form of grains or powder is possible and the method is suitable for mass production of ornamental materials.

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Searching PAJ Seite 2 von 2

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